BIOTRIBOLOGY

DESCRIPTION

Biotribology is the science of friction, lubrication and wear when applied to biological systems or natural phenomena. It is a diverse and multidisciplinary field which impacts all aspects of our daily life from prosthetic implants to personal care products and ice skating. The journal provides an international, peer-reviewed forum for this important, exciting and rapidly expanding field. Original research papers, critical review articles and case studies are solicited from scientists, engineers and clinicians working in the field.

Subject areas include, but are not limited to, the following topics:

- **Natural joints and ligaments**: Synovial and cartilaginous joints; function, damage and failure.
- **Artificial tissue replacements**: Bio-scaffolds, hydrogels, skin, dental, bone, meniscus and tendons.
- **Prostheses and implants**: Articular joints, catheters, heart pumps, stents.
- **Biomimetics**: Bio-inspired materials, surfaces and lubricants.
- **Locomotion**: human and animal; slip and accidents; pavement surface design.
- **Drug delivery**: Oral dispersive medicines; injections: tissue-needle interaction.
- **Ocular tribology**: Ocular surfaces, contact lenses, tear lubrication.
- **Skin tribology**: Damage and blistering mechanisms, bedsores, sweat lubrication.
- **Haptics**: Tactile perception and surface texture, ergonomics.
- **Personal care**: Skin and hair products, cosmetics, exfoliants.
- **Oral processing**: Foodstuffs and beverages; mouth feel and texture perception.
- **Dental tribology**: Tooth and implant wear, implant anchoring, tribo-corrosion and fracture.
- **Biotribology for industry**: Test methods, correlation with customer experience, products and packaging.
- **Sports Tribology**: Sports surfaces; equipment grip, snow and ice sports, low-friction design.
- **Biolubricants for machine elements**: Plant-derived or environmentally acceptable lubricants. Biocorrosion and bio-fouling.
- **Tribology of natural phenomena**: Earthquakes; avalanches; landslip

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